ABSTRACT

The present invention provides for dynamic thermal management of integrated circuits, including memory modules, within a computer system. The thermal management methodology described herein closely couples software operation to hardware operation of the computer system, and allows each system to run at near optimum performance levels without exceeding specified maximum temperature thresholds. In order to achieve such results, the present invention relates physical characteristics of the integrated circuit with physical characteristics of the internal chassis environment, and translates this relationship into a maximum software performance setting. The system monitors and adjusts software performance such that the maximum performance setting is not exceeded.

22